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Transmitted herewith for filing is the patent application of:

Inventor: STEVEN H. PETH

For: SYSTEM AND METHOD FOR
     AUTOMATED CREDIT MATCHING

Case Docket No
Chevron Corporation
Law Department – Patent and Licensing Unit
P. O. Box 6006
San Ramon, CA 94583-0806

Enclosed are:

☒ Specification [Total Pages = 24].
☐ An Assignment of the invention to _____.
☐ A certified copy of a _____ application.
☒ Drawing(s) [Total Sheets = 9].
☐ Combined Oath or Declaration and Power of Attorney [Total Pages =].
    ☐ Newly executed (original or copy)
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Basic Application Fee				$760.00
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Independent claims	11- 3	9	x $78.00 =	$702.00
☐ Multiple dependent claims presented			+ $260.00 =	$ 0.00
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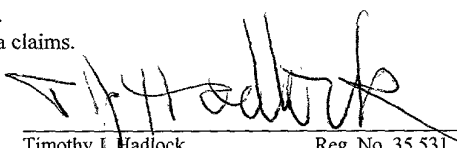
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TJHadlock·pik
Enclosures

August 23, 2000

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136431

1   BE IT KNOWN, that I, Steven H. Peth, resident of Concord, County of Contra Costa,

2   State of California, has invented new and useful improvements in a

3

4   **SYSTEM AND METHOD FOR AUTOMATED CREDIT MATCHING**

1   # SYSTEM AND METHOD FOR AUTOMATED CREDIT MATCHING

2

3   ## I.   COPYRIGHT NOTICE AND AUTHORIZATION

4   This patent document contains material which is subject to copyright protection.

11   ## II.   FIELD OF THE INVENTION

12   This invention relates to system and method for credit matching, especially in
13   facilitating eCommerce transactions.

14   ## III.   BACKGROUND OF THE INVENTION

15   Electronic commerce ("eCommerce") has proliferated over the Internet recently.
16   One difficulty in eCommerce is handling payment processes. Presently, in
17   Business-to-Consumer ("B2C") eCommerce, credit card payment and debit
18   settlement are common methods of payment where the price of goods or services
19   are relatively low. Business-to-Business ("B2B") eCommerce and some high dollar
20   transactions in the B2C eCommerce, e.g., cars or furniture, however, can involve
21   significantly higher dollar transactions than in the lower dollar B2C eCommerce.
22   Thus, in those cases credit card payments and debit settlements are often
23   inappropriate or unavailable. To date, the payment and credit mechanisms utilized
24   in B2B eCommerce transactions have followed the same model as with non-

1   eCommerce transactions. That is, to extend credit the seller evaluates the buyers

2   credit rating and offers from zero or several credit offerings.

3   The buyer either then selects one credit offering from the seller or obtains a loan

4   from a third-party lender. Traditionally, large sellers only sell to large buyers in bulk

5   with no little or no credit extension. Thus, small buyers' offers to buy small quantities

6   from large sellers are typically rejected by the large seller. This is often because the

7   small buyer requires credit and the large seller does not wish to extend credit since it

8   would result in carrying accounts receivable for numerous small buyers. All of this

9   credit offering determination and selection is manpower and time intensive, thus

10   greatly slowing the speed of the transaction. Also, if the buyer is not satisfied with

11   the credit offerings of the seller, the buyer has little or no choice to easily, quickly,

12   and conveniently secure other credit options.

13   Accordingly, there is a need for an automated credit evaluation, automated credit

14   terms matching, and automated buyer selection and offering acceptance process

15   which better matches the Internet's faster transaction capabilities and otherwise

16   overcomes the above-described deficiencies. The method and system of the

17   invention described herein provides such a solution.

18   <div align="center">IV.   <u>SUMMARY OF THE INVENTION</u></div>

19   The invention includes a method of financing eCommerce purchases including:

20   receiving over the Internet buyer registration information. Then evaluating a credit

21   rating for the buyer and passing over the Internet the credit rating to a seller, and

22   then receiving over the Internet from the seller seller's credit options for the buyer.

23   The next steps are determining other credit provider's credit options for the buyer,

24   creating a database of the credit options for the buyer. After receiving over the

25   Internet an order for the buyer, then querying the database with query criteria

26   specific to the order, thereby resulting in a report of credit options for the buyer for

27   the order. Passing over the Internet the report to the buyer; receiving over the

28   Internet the buyer's selection of a credit option; passing over the Internet a payment

1 schedule for the buyer to an intermediary; and receiving payment remitted from the

2 buyer.

3 In another embodiment, the invention includes a method of financing eCommerce

4 purchases including: evaluating a credit rating for the buyer, passing the credit rating

5 to a seller, receiving from the seller seller's credit options for the buyer, determining

6 other credit provider's credit options for the buyer, creating a database combining all

7 of the credit options for the buyer, retrieving from the database a report of credit

8 options for the buyer, passing the report to the buyer, entering a credit agreement

9 with the buyer for at least one of the credit options, passing funds borrowed pursuant

10 to the credit agreement to the buyer or the buyer's designated recipient; and

11 receiving funds from the buyer in repayment of the borrowed funds pursuant to the

12 credit agreement.

13 In another embodiment, the invention includes a memory for storing data for access

14 by an application program being executed on a data processing system, including a

15 buyer relation; a seller relation; an order relation; a credit provider relation; a credit

16 terms relation; and a products relation; and wherein the attributes of said relations

17 are selected such that such relations form a relational database.

18 In other embodiments the invention includes systems configured and adapted to

19 perform the steps listed in the above-described methods, and computer readable

20 media containing computer readable instructions configured and adapted to perform

21 the steps listed in the above-described methods.

22 These and other features and advantages of the present invention will be made

23 more apparent through a consideration of the following detailed description of a

24 preferred embodiment of the invention. In the course of this description, frequent

25 reference will be made to the attached drawings.

V.   BRIEF DESCRIPTION OF THE DRAWINGS

2   FIG. 1 is a schematic diagram combining aspects of a conceptual data model /

3   entity-relationship diagram and data flow diagram showing the key components of

4   one embodiment of the invention and their interrelationships.

5   FIG. 2 is an alternate entity-relationship diagram showing the key components of

6   one embodiment of the invention and their interrelationships.

7   FIG. 3 is a schematic block system level 0 flow chart diagram of one embodiment of

8   the invention.

9   FIG. 4 is a schematic level 1 data flow diagram (a first decomposition of the system

10   diagram in Fig. 3) and shows logical data flow between major processes of one

11   embodiment of the invention.

12   Fig. 5 is an example in one embodiment of relations for use in a credit option

13   database. By way of background, databases require a consistent structure, termed

14   a schema, to organize and manage the information. In a relational database, the

15   schema is a collection of tables. For each table, there is generally one schema to

16   which it belongs. In an implementation of a relational database, a relation

17   corresponds to a table having rows, where each row corresponds to a record (or

18   tuple), and columns, where each column corresponds to a field (or attribute). From

19   a practical standpoint, rows represent records of related data and columns identify

20   individual data elements.

21   Fig. 6A-6B illustrate in one embodiment sample SQL-type database queries for

22   matching credit options for a buyer.

23   Figs. 7-9 depicts in one embodiment various schematic diagrams of the exemplary

24   logical process involved in credit matching for various scenarios.

VI. DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

2   The major components (also interchangeably called aspects, subsystems, modules,

3   functions, services) of the system and method of the invention, and examples of

4   advantages they provide, are described below with reference to the figures. For

5   figures including process/means blocks, each block, separately or in combination, is

6   alternatively computer implemented, computer assisted, and/or human implemented.

7   Computer implementation optionally includes one or more conventional general

8   purpose computers having a processor, memory, storage, input devices, output

9   devices and/or conventional networking devices, protocols, and/or conventional

10   client-server hardware and software. Where any block or combination of blocks is

11   computer implemented, it is done optionally by conventional means, whereby one

12   skilled in the art of computer implementation could utilize conventional algorithms,

13   components, and devices to implement the requirements and design of the invention

14   provided herein. However, the invention also includes any new, unconventional

15   implementation means.

16   FIG. 1 is a schematic diagram combining aspects of a conceptual data model /

17   entity-relationship diagram and a data flow diagram. It shows the key entities of one

18   embodiment of the invention and their interrelationships and key messages

19   transferring between the entities in the practice of the process and system of the

20   invention. Transaction Facilitator ("TF") 120 optionally provides financing services to

21   multiple buyers 110, multiple sellers 115, multiple eMarket Places, and obtains

22   services from multiple credit evaluators 125. Note that a party could play multiple

23   rolls in the process at different times or at the same time. For example, a party

24   could be both a buyer of goods and a seller of goods. Buyer 110 register with,

25   passes credit option selections, and remits payments to TF 120. TF creates credit

26   profile for, and passes credit options for a particular order to, buyer 110. Buyer then

27   accepts a credit offering from TF. TF closes the financial order loop between buyer,

28   seller, credit provider and TF. TF initiates financial transactions based on accepted

29   credit terms.

1   One embodiment of a eCommerce financing method/process according to the

2   invention with the entities shown in Fig. 1 is as follows. Buyer 110 registers with

3   transaction facilitator 120. Registration includes: buyer's identification of sellers from

4   which buyer contemplates doing business; general business and financial

5   information needed to facilitate credit evaluation by TF (e.g., financial statements) or

6   seller (including existing credit enhancements from external providers); and credit

7   needs and preferences for those suppliers previously indicated.

8   Registration information of buyer 110 is processed through credit evaluator to

9   produce proprietary credit profile. The credit profile is passed with registration

10   information and/or proprietary credit profile to anticipated sellers 115 specified by

11   buyer. Seller 115 registers approved credit limit and terms for each buyer and/or

12   buyer profile with transaction facilitator.

13   Buyer 110 initiates purchase request with Market Place exchange 105. Market Place

14   Exchange passes purchase request to transaction facilitator 120. Transaction

15   facilitator 120 determines payment terms options based on approved credit limits

16   and terms offered by sellers. Transaction facilitator 120 passes sellers' purchase

17   approval and sellers' approved payment terms options, as well as TF and other 3rd

18   party credit extension, if any, to buyer.

19   Transaction facilitator 120 passes other credit offerings to buyer; these may include,

20   e.g., additional capacity to buy, longer payment terms for revolving credit. Buyer

21   110 indicates acceptance or rejection of terms offered by the supplier or by the

22   transaction facilitator. Transaction facilitator 120 notifies Market Exchange 105 of

23   buyers 110 acceptance and selected payment method. Market Exchange 105

24   advises transaction facilitator as to when events occur that trigger dates required to

25   schedule payment (e.g., ship date).

26   Transaction facilitator passes payment scheduling information to the Market Place

27   Exchange. Transaction facilitator 120 advises Market Place Exchange when to

28   prompt buyer for payment (full transaction information is optionally located in the

1 Market Place Exchange). Buyer remits payment to transaction facilitator, or TF

2 initiates EFT according to buyer-accepted payment schedule. Transaction facilitator

3 aggregates payments from many buyers for each seller and remits funds to seller

4 with accounts receivable information. Also, the functions of the TF could be

5 combined with some or all of the roles of a Market Place Exchange, especially

6 financial roles, or vice versa. TF may only be a service provider or optionally may

7 also be a lender/credit provider.

8 Numerous variations on the above method will be understood by those skilled in the

9 art and are within the scope of the invention. For example, payment remittance

10 could pass from buyer 110 to Market Place Exchange 105 or other intermediary

11 before passing to TF 120 or could pass directly to Seller 115 where Seller is the

12 lender/credit provider.

13 FIG. 2 is an alternate entity-relationship diagram showing the key components of

14 one embodiment of the invention and their interrelationships. Fig. 2 depicts

15 substantially the same entities and relationships as in Fig. 1 except that a new entity

16 is depicted, i.e., the buyers' and/or sellers' financial institution 220. Receipt of

17 payment remittances from buyer is optionally directly from buyer's financial

18 institution, e.g., by ACH or EFT. Transfer of funds from TF 215 to seller 210 is

19 optionally made directly to seller's financial institution 220. In the TF entity 215,

20 internal processes shown include credit extension, transaction clearing, data mining,

21 accounting reporting, and terms matching. TF 215 optionally maintains its own data

22 for determining a buyer's credit score and corresponding credit options to be

23 extended to buyer 225.

24 TF 215 passes buyer registration information to seller 210 and seller passes

25 available credit terms/limits for buyer to TF. TF passes buyer registration

26 information to credit evaluator 230 (also referenced throughout as Credit Info.

27 Provider) (e.g., Experian, Dunn & Bradstreet), and receives credit score and/or other

28 financial information back from credit evaluator. An eMarket place 205 passes a

29 buyer's order information, and payment triggering dates, to TF 215. TF passes

1 buyer credit option selection and payment schedule to eMarket Place 205. There

2 are several variations on the buyer registration step and credit evaluation step, e.g.,

3 automated registration via cookies or related technologies. Also, credit evaluation

4 could involve accessing, separately or in combination, a plurality of commercial and

5 proprietary databases for credit histories. That credit information may optionally be

6 processed, separately or in combination, through a plurality of commercial and

7 proprietary credit evaluation application programs to determine the risk of lending to

8 a particular buyer.

9 FIG. 3 is a schematic block system level 0 flow chart diagram of one embodiment of

10 the invention. Buyer 305 passes registration information to the Transaction

11 Facilitation ("TF") Process 0. The TF process 0 passes this registration information

12 to Credit Information Provider 320. The Credit Info. Provider performs a credit

13 scoring process on the Registration Information together with any credit history

14 information held by the Credit Info. Provider to develop a credit score, credit profile,

15 and/or other product useful for a Credit Provider in assessing risk (individually or in

16 any combination referred to as "credit score"). The Credit Info. Provider 320 passes

17 the Buyer's credit score to the TF process 0. In the TF process, the credit score is

18 passed to one or more sellers 310. The sellers use the credit score in a credit

19 evaluation process to develop credit offerings for a buyer 305. The seller passes the

20 credit offerings for a buyer to the TF process. In the TF process, a database (or look

21 up table) is created containing all available credit offerings from all sellers

22 designated in the buyer's registration and from any third-parties.

23 Upon receiving a product/service order from a buyer, an eMarketplace will pass the

24 order with buyer's credit preferences for that order to the TF process. In the TF

25 process, a matching process occurs whereby the buyer's credit preferences are

26 compared to credit offerings available from the seller(s) and, if none or insufficient,

27 credit offerings of third-parties and/or optionally the TF are checked. One or more

28 credit offerings are then passed to the buyer 305 who selects one option and passes

29 that decision to the TF process.

1   In the TF process, the buyer's credit selection together with a corresponding

2   payment schedule is passed to the eMarketplace. The buyer remits payments or TF

3   initiates EFT draft or other payment according to the payment schedule set during

4   the ordering process. In the TF process the buyer's payment is transferred to the

5   seller if the seller extended the credit less an transaction fee, if any. Where a third-

6   party provides some or all of the credit, the TF process transfers payment to the

7   seller upon shipment of products or other designated schedule. Alternatively, third-

8   party funds are transferred to the buyer, who is the borrower, who then arranges

9   payment with the seller.

10   FIG. 4 is a schematic level 1 data flow diagram (a first decomposition of the system

11   diagram in Fig. 3) and shows logical data flow between major processes of one

12   embodiment of the invention. Information about a Buyer, e.g., registration

13   information and credit history 405, optionally from the buyer, credit agencies, and/or

14   a plurality of other data sources passes to process 1.0, Determine Credit Rating

15   Process. There a credit rating 410 (also referred to throughout as "credit score") is

16   determined and passed to process 2.0, Determine Credit Options Process. That

17   process determines credit options 415 for a buyer and passes information about

18   those credit options 415 to process 3.0, Create database of Credit Options for Buyer

19   Process.

20

21   The time elapsed between the buyer registration step and the completion of the

22   creation of credit options database step is preferably minimal, e.g., less than 5, 3, 2,

23   or 1 minute, or more preferably in real-time. In order for the data, e.g., buyer

24   registration data, to be successfully passed between the processes, the data must

25   be in a format acceptable to the receiving process. Preferably, to facilitate

26   implementation among a large number of users, a standard format will be

27   developed, such as is possible using Extensible Markup Language, the universal

28   format for structured documents and data on the Web. Several industry-specific

29   XML standard formats already exist.

1   In an optional step in the process the TF receives data from the buyer, seller, and/or

2   eMarket Place regarding shortages, spoilages, breakages, or other problems with a

3   received order. The TF processes this data in an order/invoice adjustment process

4   to produce a revised order, payment terms statement to send the eMarket Place,

5   buyer, and/or seller.

6   A structured database, typically using the relational model, is created using

7   conventional tools, e.g., a relational database management system ("RDBMS"). A

8   buyer's order 420 is based to process 4.0, Query Database for each Order of Buyer

9   Process. Optionally, using conventional searching technology commonly provided

10   with commercial RDBMS' or proprietary technology, the database is queried to

11   determine available credit options for the buyer for the particular order. A report 425

12   is created of those options and passed to process 5.0, Buyer Selects Credit Option

13   Process. The time elapsed between the order step and the completion of the credit

14   options search step is preferably minimal, e.g., less than 5, 3, 2, or 1 minute, or

15   more preferably in real-time. The buyer's selection 430 is passed to process 6.0,

16   Fulfill Order and Collect Payment Per Terms of Credit Option Selection Process.

17   Fig. 5 is an example in one embodiment of relations for use in a credit option

18   database. The Buyer relation 510 in one embodiment contains the following

19   attributes: Buyer ID, Name, Contact Info., Credit Score, and Credit terms ID(s). The

20   Seller relation 520 in one embodiment contains the following attributes: Seller ID,

21   Name, Contact Info., and Credit Provider ID . The Credit Provider relation 530 in one

22   embodiment contains the following attributes: Credit Provider ID, Name, Contact

23   Info., and Approved Buyer ID(s). The Credit Terms relation 515 in one embodiment

24   contains the following attributes: Credit Terms ID, Limit, Payment Schedule,

25   Interest, Penalties, and Credit Provider ID. The Order relation 525 contains the

26   following attributes: Order ID, Buyer ID, Seller ID, Product ID(s), Credit terms ID,

27   Credit Provider ID, and Quantity. The Products relation 535 in one embodiment

28   contains the following attributes: Product ID, Seller ID(s) and Product Description.

29   Selection of attributes, attribute domains, keys and foreign keys, and normalization

1 of relations sufficient to enable a database for determining available credit options

2 for a particular buyer, having particular credit preferences, in a particular order, and

3 from particular sellers is within the normal skill of one schooled in the database arts.

4 A seller's or other credit provider's credit offerings may vary depending on many

5 factors, e.g., financial condition, economy, inventory, accounts receivables, buyer's

6 status or order details, or other factors. Thus, in one embodiment of the invention

7 the database is updated at regular intervals or upon some triggering event, e.g.,

8 based on size of an order, lapsed time from most recent order, or upon seller's

9 request. As a result the credit score or evaluation of a buyer, the credit offerings of a

10 seller or credit provider, and the credit offerings for a given order will be updated

11 continually or on a flexible schedule as needed.

12 Fig. 6A,B illustrates in one embodiment sample SQL-type database queries for

13 matching credit options for a buyer. Figure 6A depicts an exemplary SQL-type

14 query where each seller's credit options for a buyer are stored in separate Seller

15 relations. Figure 6B depicts an exemplary SQL-type query where all credit options

16 from all sellers and third-parties for all buyers are stored in separate Credit Terms

17 relations. Persons skilled in the database arts know various alternative queries

18 appropriate for a variety of database structures sufficient to return all credit options

19 for a particular buyer.

20 Figs. 7-9 depicts in one embodiment various schematic diagrams of the exemplary

21 logical process involved in credit matching for various scenarios. With reference to

22 Fig. 7, in this example, seller requirements 705 for cash settlement are transferred to

23 TF and matched against credit requirements 710 as outlined by the buyer. In this

24 case, a match is made for "EFT" settlement at 10 days following delivery. Dates of

25 delivery and receipt are fed from the market exchange and TF executes the

26 transaction on the appropriate date.

27 With reference to Fig. 8, in this example, seller requirements 805 for cash settlement

28 are transferred to TF and matched against credit requirements 810 as outlined by

1   the buyer. In this case, there is no match between buyer and seller. The exchange

2   steps in with its credit offerings 815 to facilitate the transaction accepting the buyers

3   desired used of a 3rd party bankcard on behalf of the seller. Cost of the interchange

4   fee can be passed (or not passed) on from the seller to the buyer in the form of a

5   handling or other transaction fees. Dates of delivery and receipt are fed from the

6   market exchange and Riverpool executes the transaction on the appropriate date.

7   With reference to Fig. 9, in this example, seller requirements 905 for cash settlement

8   are transferred to TF and matched against credit requirements 910 as outlined by

9   the buyer. In this case, Seller wants good funds 10 days after delivery and buyer

10   wants credit for 30 days. The eMarket Exchange (also referenced throughout as

11   eMarket Place) or TF steps in with it credit offerings 915 to provide credit for 20 days

12   to buyer at appropriate "pricing" based on risk assessment. Dates of delivery and

13   receipt are fed from the eMarket exchange and TF executes the transaction on the

14   appropriate dates.

15   The web site for the system includes conventional web site development

16   considerations known to experienced web site developers. Such considerations

17   include content, content clearing, presentation of content, architecture, database

18   linking, external web site linking, number of pages, overall size and storage

19   requirements, maintainability, access speed, use of graphics, choice of metatags to

20   facilitate hits, privacy considerations, and disclaimers.

21   Optionally, a test environment is used prior to deployment of the production system.

22   In the test environment, the web site is loaded into an isolated test environment for

23   debugging and for other test purposes. A piloting step is also optionally utilized (it

24   may also be called an alpha and/or beta testing step/means. In the pilot step, the

25   system is internally test marketed. The piloting step/means optionally includes

26   formally or informally gathering feedback from the internal users of the web site for

27   use in improving and debugging the site and for use in planning the marketing step.

1   <u>VI.   CLAIMS</u>

2   WHAT IS CLAIMED IS:

3   1.   A method of financing eCommerce purchases comprising:

4   (a)   Receiving over the Internet buyer registration information;

5   (b)   Evaluating a credit rating for said buyer;

6   (c)   Passing over the Internet said credit rating to a seller;

7   (d)   Receiving over the Internet from said seller seller's credit options for said
8   buyer;

9   (e)   Determining other credit provider's credit options for said buyer;

10   (f)   Creating a database of said credit options for said buyer;

11   (g)   Receiving over the Internet an order for said buyer;

12   (h)   Querying said database with query criteria specific to said order, thereby
13   resulting in a report of credit options for said buyer for said order;

14   (i)   Passing over the Internet said report to said buyer;

15   (j)   Receiving over the Internet said buyer's selection of a credit option;

16   (k)   Passing over the Internet a payment schedule for said buyer; and

17   (l)   Receiving payment remitted from said buyer.

1   2.   The method of claim 1, wherein said creating step (f) occurs on a pre-

2   determined schedule, in response to pre-determined triggering events, upon a

3   seller's or credit provider's request, and mixtures thereof.

4   3.   The method of claim 1, wherein the time elapsed between said receiving step

5   (g) and said passing step (i) occurs in substantially real-time.

6   4.   A method of financing eCommerce purchases comprising:

7   (a)   Receiving over the Internet buyer registration information;

8   (b)   Evaluating a credit rating for said buyer;

9   (c)   Passing over the Internet said credit rating to a seller;

10   (d)   Receiving over the Internet from said seller seller's credit options for said

11   buyer;

12   (e)   Determining other credit provider's credit options for said buyer;

13   (f)   Creating a database of said credit options for said buyer;

14   (g)   Receiving over the Internet an order for said buyer;

15   (h)   Querying said database with query criteria specific to said order, thereby

16   resulting in a report of credit options for said buyer for said order;

17   (i)   Passing over the Internet said report to said buyer;

18   (j)   Receiving over the Internet said buyer's selection of a credit option;

19   (k)   Passing over the Internet a payment schedule for said buyer; and

1   (l)   Receiving payment remitted from said buyer

2   (m)   wherein the time elapsed between said receiving step (g) and said
3   passing step (i) is less than about five minutes.

4   5.   The method of claim 4, wherein said creating step (f) occurs on a pre-
5   determined schedule, in response to pre-determined triggering events, upon a
6   seller's or credit provider's request, and mixtures thereof.

7   6.   The method of claim 4, wherein the time elapsed between said receiving step
8   (g) and said passing step (i) occurs in substantially real-time.

9   7.   A method of financing eCommerce purchases comprising:

10 (a)   Evaluating a credit rating for said buyer;

11 (b)   Passing said credit rating to a seller;

12 (c)   Receiving from said seller seller's credit options for said buyer;

13 (d)   Determining other credit provider's credit options for said buyer;

14 (e)   Creating a database combining all of said credit options for said buyer;

15 (f)   Retrieving from said database a report of credit options for said buyer;

16 (g)   Passing said report to said buyer;

17 (h)   Entering a credit agreement with said buyer for at least one of said credit
18   options;

19 (i)   Passing funds borrowed pursuant to said credit agreement to said buyer
20   or the buyer's designated recipient; and

1   (j)   Receiving funds from said buyer in repayment of said borrowed funds

2   pursuant to said credit agreement.

3   8.   The method of claim 7, wherein said creating step (e) occurs on a pre-

4   determined schedule, in response to pre-determined triggering events, upon a

5   seller's or credit provider's request, and mixtures thereof.

6   9.   The method of claim 7, wherein the time elapsed between said retrieving step

7   (f) and said passing step (g) occurs in substantially real-time.

8   10.   The method of claim 7, wherein said passing, retrieving, and receiving steps

9   occur over a network comprising the Internet.

10   11.   A method of financing eCommerce purchases comprising:

11   (a)   Evaluating a credit rating for said buyer;

12   (b)   Passing said credit rating to a seller;

13   (c)   Receiving from said seller seller's credit options for said buyer;

14   (d)   Determining other credit provider's credit options for said buyer;

15   (e)   Creating a database combining all of said credit options for said buyer;

16   (f)   Retrieving from said database a report of credit options for said buyer;

17   (g)   Passing said report to said buyer;

18   (h)   Entering a credit agreement with said buyer for at least one of said credit

19   options;

1   (i)   Passing funds borrowed pursuant to said credit agreement to said buyer

2   or the buyer's designated recipient; and

3   (j)   Receiving funds from said buyer in repayment of said borrowed funds

4   pursuant to said credit agreement.

5   (k)   wherein the time elapsed between said retreiving step (f) and said

6   passing step (i) is less than about three minutes.

7   12.   The method of claim 11, wherein said passing, retrieving, and receiving steps

8   occur over a network comprising the Internet.

9   13.   The method of claim 11, wherein said creating step (e) occurs on a pre-

10   determined schedule, in response to pre-determined triggering events, upon a

11   seller's or credit provider's request, and mixtures thereof

12   14.   A method of facilitating commercial transactions over a network, said method

13   comprising:

14   (a)   Creating a database of credit options for a buyer;

15   (b)   Receiving over a network an order for said buyer;

16   (c)   Querying said database with query criteria specific to said buyer and to

17   said order, thereby resulting in a report of credit options for said buyer for

18   said order;

19   (d)   Passing said report over said network to said buyer; and

20   (e)   Receiving over said network said buyer's selection of a credit option.

21   15.   The method of claim 14, wherein the time elapsed between said receiving step

22   (b) and said passing step (d) is not substantially greater than real-time.

1   16.   The method of claim 14, wherein said creating step (a) occurs on a pre-

2   determined schedule, in response to pre-determined triggering events, upon a

3   seller's or credit provider's request, and mixtures thereof.

4   17.   The method of claim 14, wherein said network comprises the Internet.

5   18.   A method of facilitating commercial transactions over a network, said method

6   comprising:

7   (a)   Creating a database of credit options for a buyer;

8   (b)   Receiving over a network an order for said buyer;

9   (c)   Querying said database with query criteria specific to said buyer and to

10   said order, thereby resulting in a report of credit options for said buyer for

11   said order;

12   (d)   Passing said report over said network to said buyer;

13   (e)   Receiving over said network said buyer's selection of a credit option; and

14   (f)   wherein the time elapsed between said receiving step (b) and said

15   passing step (d) is not substantially greater than real-time.

16   19.   The method of claim 18, wherein said creating step (a) occurs on a pre-

17   determined schedule, in response to pre-determined triggering events, upon a

18   seller's or credit provider's request, and mixtures thereof.

19   20.   The method of claim 18, wherein said network comprises the Internet.

20   21.   A method of facilitating commercial transactions over a network, said method

21   comprising:

1   (a)   Creating a database of credit options for a buyer;

2   (b)   Receiving over a network an order for said buyer;

3   (c)   Querying said database with query criteria specific to said buyer and to
4   said order, thereby resulting in a report of credit options for said buyer for
5   said order;

6   (d)   Passing said report over said network to said buyer, wherein the time
7   elapsed between said receiving step (b) and said passing step (d) is less
8   than about two minutes; and

9   (e)   Receiving over said network said buyer's selection of a credit option.

10   22.   The method of claim 21, wherein said time elapsed is substantially real-time.

11   23.   The method of claim 21, wherein said creating step (a) occurs on a pre-
12   determined schedule, in response to pre-determined triggering events, upon a
13   seller's or credit provider's request, and mixtures thereof.

14   24.   The method of claim 21, wherein said network comprises the Internet.

15   25.   Computer-readable media tangibly embodying a database schema comprising:

16   (a)   a buyer relation;

17   (b)   a seller relation;

18   (c)   an order relation;

19   (d)   a credit provider relation;

20   (e)   a credit terms relation; and

1   (f)   a products relation; and

2   (g)   wherein the attributes of said relations are selected such that such
3   relations form a relational database.

4   26.   A memory for storing data for access by an application program being
5   executed on a data processing system, comprising

6   (a)   a buyer relation;

7   (b)   a seller relation;

8   (c)   an order relation;

9   (d)   a credit provider relation;

10   (e)   a credit terms relation; and

11   (f)   a products relation; and

12   *(g)* wherein the attributes of said relations are selected such that such
13   relations form a relational database.

14   27.   Computer-readable media tangibly embodying a database schema comprising:

15   (a)   a buyer relation comprising attributes sufficient to uniquely describe said
16   buyer and comprising at least one foreign key or having its key as a
17   foreign key in another relation sufficient to capture said buyer relation's
18   relationship with at least one other relation;

19   (b)   a seller relation comprising attributes sufficient to uniquely describe said
20   buyer and comprising at least one foreign key or having its key as a

1   foreign key in another relation sufficient to capture said seller relation's

2   relationship with at least one other relation;

3   (c)   a credit provider relation comprising attributes sufficient to uniquely

4   describe said buyer and comprising at least one foreign key or having its

5   key as a foreign key in another relation sufficient to capture said buyer

6   relation's relationship with at least one other relation;

7   (d)   a credit terms relation comprising attributes sufficient to uniquely describe

8   said buyer and comprising at least one foreign key or having its key as a

9   foreign key in another relation sufficient to capture said credit terms

10   relation's relationship with at least one other relation; and

11   (e)   wherein the attributes of said relations are selected such that such

12   relations form a relational database.

13   28.   In an eCommerce vertical marketplace, a method of operating a database

14   management system for facilitating extension of credit, said method

15   comprising:

16   (a)   Receiving information about a buyer sufficient to evaluate the relative risk

17   of extending credit to said buyer;

18   (b)   Determining said relative risk;

19   (c)   Determining a plurality of credit options for said buyer from a plurality of

20   credit providers based on said relative risk determined in step (b);

21   (d)   Creating a database of said credit options for said buyer;

22   (e)   Wherein said database is constructed and adapted for querying, thereby

23   resulting in a report of credit options for said buyer; and

1   (f)   Wherein said database is in communication with a network constructed

2   and adapted for passing said report to said buyer or to an intermediary for

3   passing to said buyer.

4   29.   The method of claim 28, wherein the time elapsed between said receiving step

5   (b) and said creating step (d) is less than about one minute.

6   30.   The method of claim 28, wherein the time elapsed between said receiving step

7   (b) and said creating step (d) occurs in substantially real-time.

8   31.   The method of claim 28, wherein said network comprises the Internet.

Abstract of the Disclosure

1

2   The invention includes a method of financing eCommerce purchases including:

3   receiving over the Internet buyer registration information. Then evaluating a credit

4   rating for the buyer and passing over the Internet the credit rating to a seller, and

5   then receiving over the Internet from the seller seller's credit options for the buyer.

6   The next steps are determining other credit provider's credit options for the buyer,

7   creating a database of the credit options for the buyer. After receiving over the

8   Internet an order for the buyer, then querying the database with query criteria

9   specific to the order, thereby resulting in a report of credit options for the buyer for

10   the order. Passing over the Internet the report to the buyer; receiving over the

11   Internet the buyer's selection of a credit option; passing over the Internet a payment

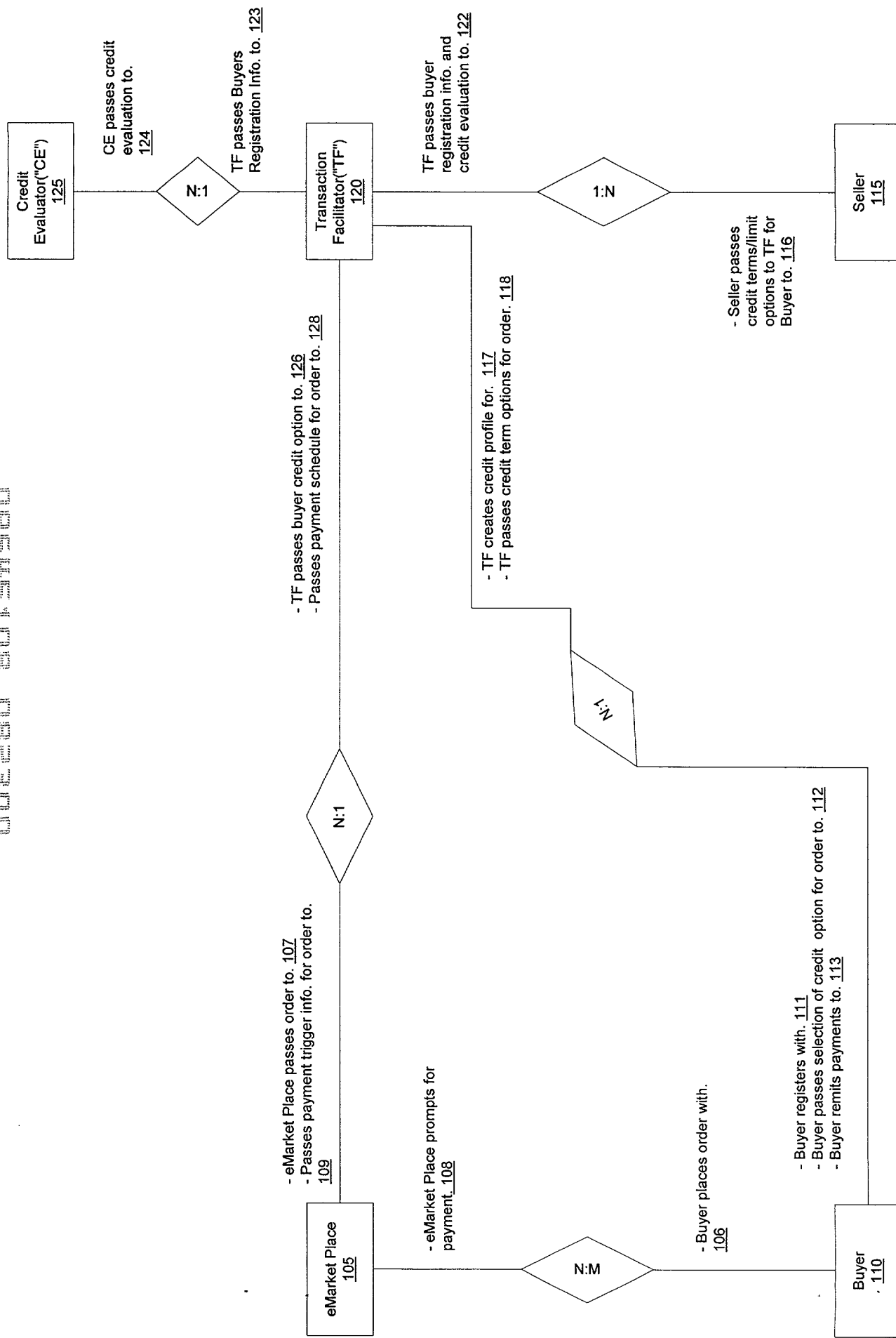12   schedule for the buyer to an intermediary; and receiving payment remitted from the
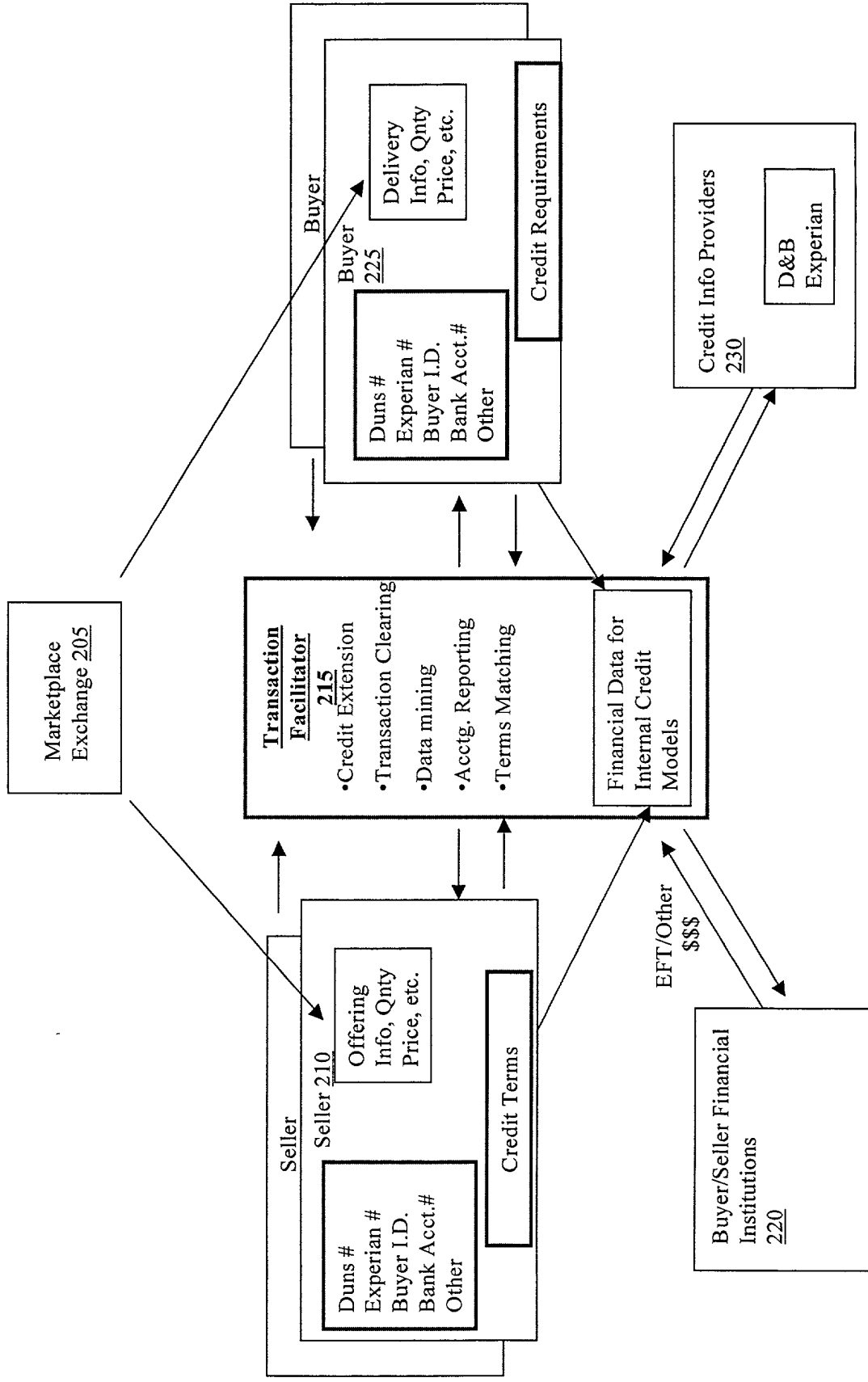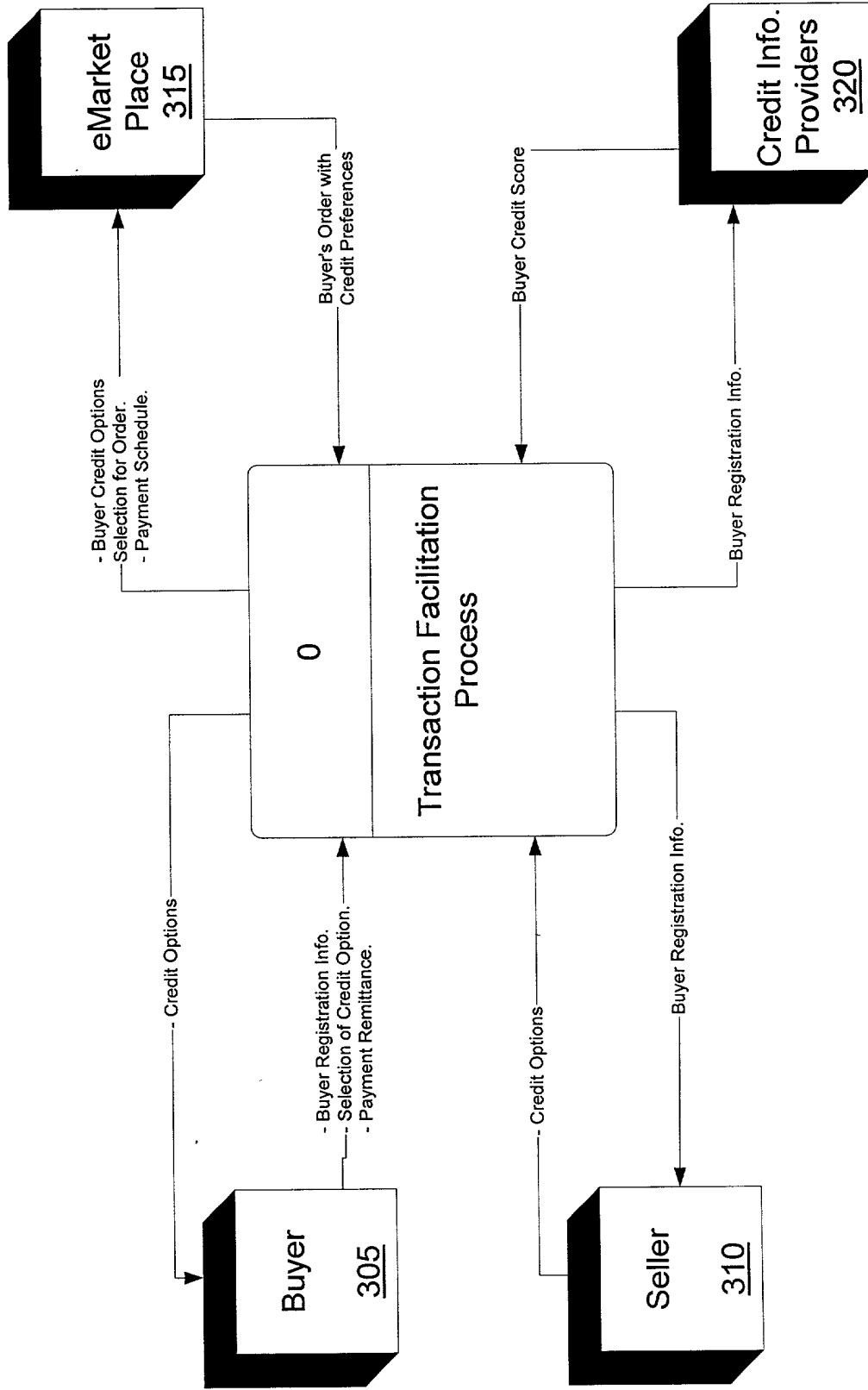
13   buyer.

FIGURE 1

Marketplace
Exchange 205

Buyer

Buyer 225

Delivery
Info, Qnty
Price, etc.

Duns #
Experian #
Buyer I.D.
Bank Acct.#
Other

Credit Requirements

Credit Info Providers
230

D&B
Experian

**Transaction
Facilitator
215**
• Credit Extension
• Transaction Clearing
• Data mining
• Acctg. Reporting
• Terms Matching

Financial Data for
Internal Credit
Models

Seller

Seller 210

Offering
Info, Qnty
Price, etc.

Duns #
Experian #
Buyer I.D.
Bank Acct.#
Other

Credit Terms

EFT/Other
$$$

Buyer/Seller Financial
Institutions
220

FIGURE 2

FIGURE 3

FIGURE 4

Buyer 510

- Buyer ID
- Name
- Contact Info.
- Credit Score
- Credit terms ID(s)

Credit Terms 515

- Credit Terms ID
- Limit
- Payment Schedule
- Interest
- Penalties
- Credit Provider ID

Seller 520

- Seller ID
- Name
- Contact Info.
- Credit Provider ID

Order 525

- Order ID
- Buyer ID
- Seller ID
- Product ID(s)
- Credit terms ID
- Credit Provider ID
- Quantity

Credit Provider 530

- Credit Provider ID
- Name
- Contact Info.
- Approved Buyer ID(s)

Products 535

- Product ID
- Seller ID(s)
- Product Description
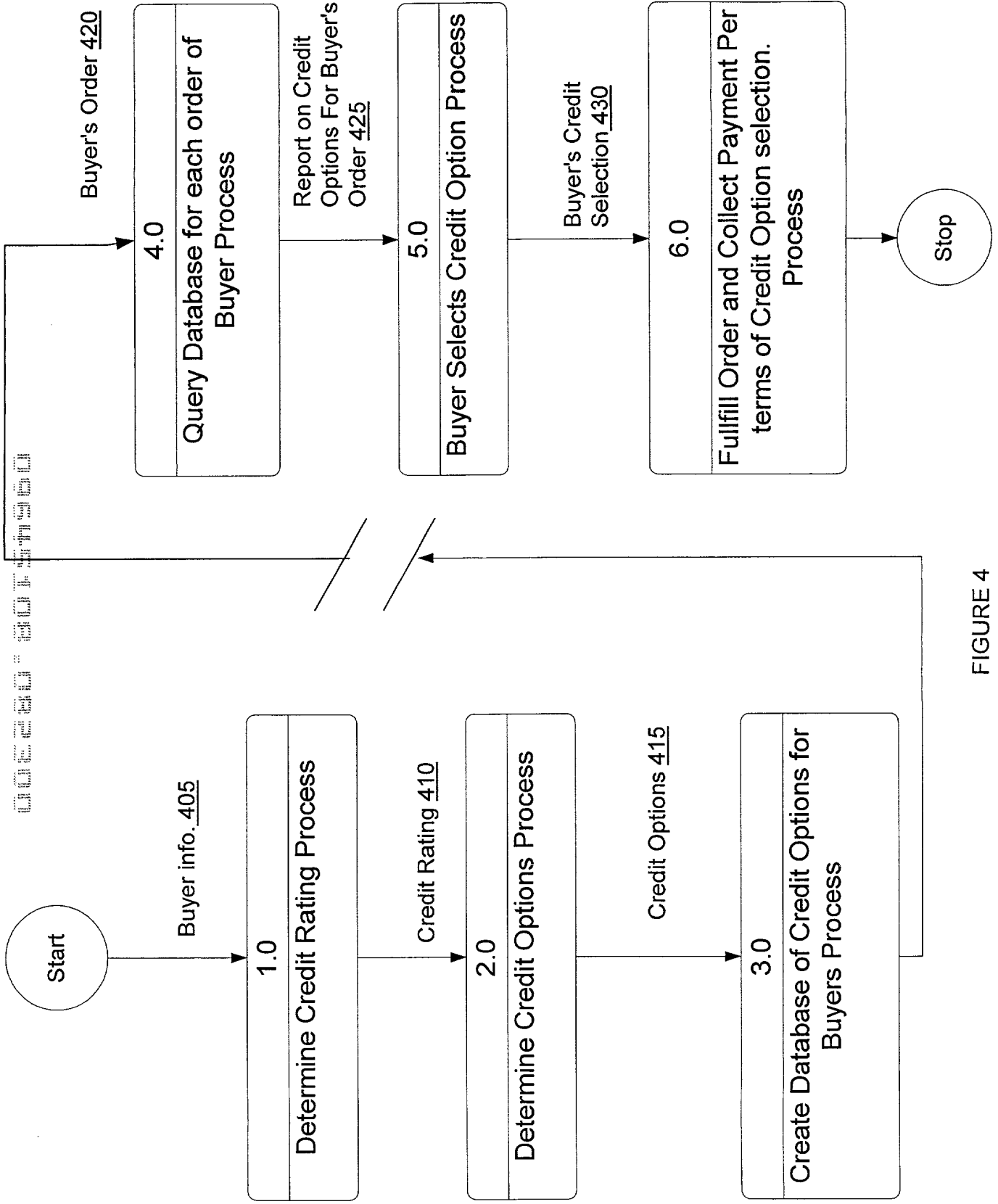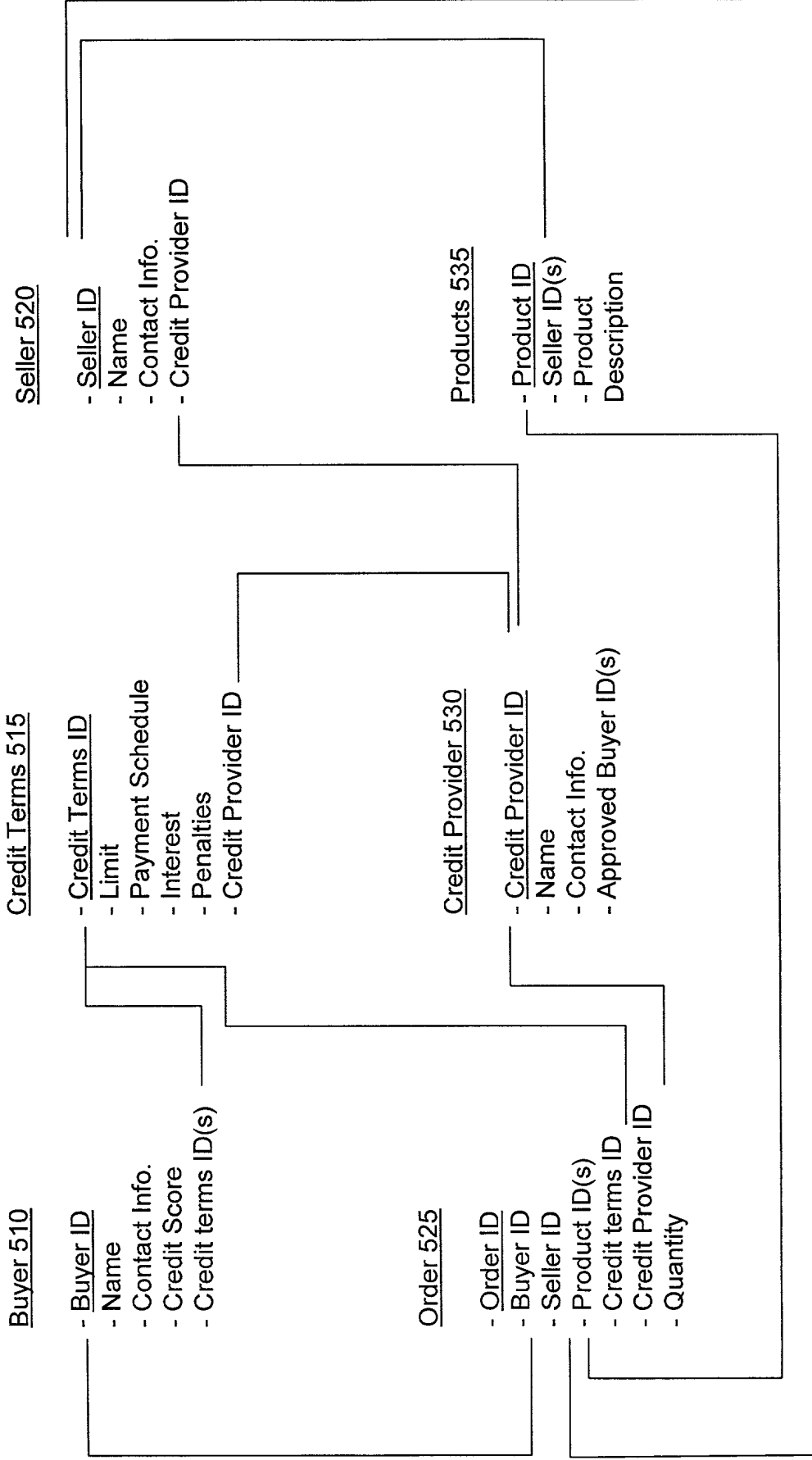
FIGURE 5

SELECT *
FROM SELLER1, SELLER 2, SELLER_N
WHERE (SELLER_N.Attribute 1
OR
SELLER_N.ATTRIBUTE 2
OR
SELLER_N.ATTRIBUTE_N) = ' ____Insert Buyers Credit Preferences____'
AND SELLER_N.ATTRIBUTE_N = BUYER.Attribute_N;

FIG. 6A

SELECT *
FROM CREDIT_TERMS
WHERE (CREDIT_TERMS.Attribute 1
OR
CREDIT_TERMS.ATTRIBUTE 2
OR
CREDIT_TERMS.ATTRIBUTE_N) = ' ____Insert Buyers Credit Preferences____'
AND CREDIT_TERMS.ATTRIBUTE_N = BUYER.Attribute_N;

FIG. 6B

/ 705

Seller	Other/Specific # Days	N/10	30	60	90	120		
3rd Party Cards								
ACH/EFT								
Debit								
Procard								
B2B/B2C Exchange								
External								

Buyer	Other/Specific # Days	N/10	30	60	90	120		
3rd Party Cards								
ACH/EFT								
Debit								
Procard								
B2B/B2C Exchange								
External								

710

FIGURE 7

805

Seller

Other/Specific # Days	N/10	30	60	90	120	
3rd Party Cards						
ACH/EFT	▓					
Debit						
Procard						
B2B/B2C Exchange	▓			▓		
External						

815

B2Bxch

Other/Specific # Days	N/10	30	60	90	120	
3rd Party Cards	█					
ACH/EFT						
Debit						
Procard						
External						

810

Buyer

Other/Specific # Days	N/10	30	60	90	120	
3rd Party Cards	▓					
ACH/EFT						
Debit						
Procard						
B2B/B2C Exchange						
External						

FIGURE 8

905

Seller	Other/Specific # Days	N/10	30	60	90	120
3rd Party Cards						
ACH/EFT		▨				
Debit						
Procard						
B2B/B2C Exchange		▨				
External						

915

B2Bxch	Other/Specific # Days	N/10	30	60	90	120
3rd Party Cards			▨			
ACH/EFT						
Debit						
Procard						
External						

910

Buyer	Other/Specific # Days	N/10	30	60	90	120
3rd Party Cards			▨			
ACH/EFT						
Debit						
Procard						
B2B/B2C Exchange						
External						

FIGURE 9